IN THE CLAIMS

Please cancel claims 1-31 – all the claims in the case (see above).

Please add the following new claims:

33. ~~32.~~ (New) A method for transforming cells of an organ or tissue in a patient which comprises delivering into the vascular circulation of the organ or tissue a viral vector comprising a recombinant nucleic acid, wherein the vector transforms cells of the organ or tissue and the recombinant nucleic acid is expressed.

34. ~~33.~~ (New) The method of claim 32 wherein the vector is replication-deficient.

35. ~~34.~~ (New) The method of claim 32 or 33 wherein the vector is an adenoviral vector.

36. ~~35.~~ (New) The method of claim 32 wherein the viral vector is purified.

37. ~~36.~~ (New) The method of claim 32 wherein the vector is delivered into a vein.

38 ~~37.~~ (New) The method of claim 32 wherein the vector is delivered into an artery.

39. ~~38.~~ (New) The method of claim 32 further comprising delivering a growth factor to the vascular circulation, the growth factor being sufficient to enhance transformation of the cells with the nucleic acid.

40. ~~39.~~ (New) The method of claim 32 wherein the vector is delivered into the vascular circulation of the heart of the patient.

41. ~~40.~~ (New) The method of claim 32 wherein the vector is delivered into the vascular circulation of a peripheral vascular tissue of the patient.

42. ~~41.~~ (New) The method of claim 32 wherein the tissue is kidney, bowel, parenchymal, liver or cerebral tissue of the patient.

43. ~~42.~~ (New) The method of claim 32 wherein the viral vector is delivered into the circulation of the organ or tissue via a catheter.

44. ~~43.~~ (New) The method of claim 32 wherein the vector is delivered into the circulation by means of a device comprising a syringe.

45. ~~44.~~ (New) The method of claim 32 wherein the viral vector is delivered into the vascular circulation of the organ or tissue by injection of the vector into a capillary bed.

46. ~~45.~~ (New) The method of claim 32 wherein the organ is a heart, kidney, liver or brain.

47. ~~46.~~ (New) The method of claim 32 wherein the nucleic acid encodes a protein or factor competent to induce angiogenesis.

48. ~~47.~~ (New) The method of claim 32 wherein the nucleic acid encodes a protein or factor competent to induce revascularization.

49. ~~48.~~ (New) The method of claim 32 wherein the nucleic acid encodes a vasoactive factor.

50. ~~49.~~ (New) The method of claim 32 wherein the recombinant nucleic acid encodes a growth factor or angiogenic factor.

51.

50. (New) The method of claim 32 wherein the recombinant nucleic acid is selected from the group consisting of a nucleic acid encoding TGFa, TGFb , PDGF, aFGF and bFGF.

52.

51. (New) A method for transforming cells of an organ or tissue in a patient which comprises the step of delivering a replication-deficient adenovirus vector comprising a recombinant nucleic acid into the arterial circulation of the organ or tissue, wherein the vector transforms cells of the organ or tissue and the recombinant nucleic acid is expressed.

53.

52. (New) A method for transforming cells of an organ or tissue in a patient which comprises delivering a replication-deficient adenovirus vector comprising a recombinant nucleic acid into the venous circulation of the organ or tissue, wherein the vector transforms cells of the organ or tissue and the recombinant nucleic acid is expressed.

54.

53. (New) The method of claim 51 or 52 wherein the recombinant nucleic acid encodes a protein or factor competent to induce angiogenesis.

55

54. (New) The method of claim 51 or 52 wherein the nucleic acid encodes a protein or factor competent to induce revascularization.

56.

55. (New) The method of claim 51 or 52 wherein the nucleic acid encodes a vasoactive factor.

57

56. (New) The method of claim 51 or 52 wherein the recombinant nucleic acid is selected from the group consisting of a nucleic acid encoding TGFa, TGFb, PDGF, aFGF and bFGF.

57. (New) The method of claim 51 or 52 wherein the replication-deficient adenovirus is delivered into the circulation by catheter.

58. (New) The method of claim 51 or 52 wherein the replication-deficient adenovirus is delivered into the circulation of the heart of the patient.

59. (New) The method of claim 51 or 52 wherein replication-deficient adenovirus is delivered into the circulation of a peripheral vascular tissue.

60. (New) A method for effecting angiogenesis within an organ or tissue in a patient which comprises introducing a vector comprising a recombinant nucleic acid encoding a growth factor or angiogenic factor into the circulation proximal to the organ or tissue, wherein the vector transforms cells of the organ or tissue and the recombinant nucleic acid is expressed, thereby effecting angiogenesis.

61. (New) The method of claim 60 wherein the vector is a replication-deficient adenovirus.

62. (New) The method of claim 60 wherein the vector is delivered to the circulation proximal to the heart of the patient.

63. (New) The method of claim 60 wherein the vector is delivered to the circulation proximal to peripheral vascular tissue.

64. (New) A method of transforming cells of a blood vessel wall, or cells of a tissue perfused by the blood vessel, which comprises (a) injecting into the vessel a vector comprising a recombinant nucleic acid, wherein the vector transforms the cells and the nucleic acid is expressed in the cells; and (b) delivering to the vessel a growth factor competent to enhance transformation efficiency of the vector.

66. ~~65.~~ (New) The method of claim 64 wherein (a) and (b) are performed together.

67 ~~66.~~ (New) The method of claim 64 wherein the vector is an adenoviral vector.

68 ~~67.~~ (New) The method of claim 64 wherein the nucleic acid encodes a protein or factor competent to induce angiogenesis.

69 ~~68.~~ (New) A method of introducing protein or factor in a mammal which comprises delivering to a blood vessel in the mammal a transfected vascular cell, the transfected cell comprising an exogenous nucleic acid encoding the protein or factor and competent to express the protein or factor when implanted in the mammal.

70. ~~69.~~ (New) The method of claim 68 wherein the transfected cell becomes attached to the wall of the vessel in the mammal.

71. ~~70.~~ (New) The method of claim 68 wherein the transfected cell is an endothelial cell or a smooth muscle cell.

72. ~~71.~~ (New) The method of claim 68 wherein the exogenous nucleic acid encodes a therapeutic agent.

73 ~~72.~~ (New) The method of claim 68 wherein the recombinant protein or factor is competent to induce angiogenesis.

74 ~~73.~~ (New) The method of claim 68 wherein the recombinant protein or factor is competent to induce revascularization.

75 ~~74.~~ (New) The method of claim 68 wherein the protein or factor is useful in the treatment of an ischemic organ.

76 ~~75.~~ (New) The method of claim 74 wherein the organ is a heart, liver, bowel, kidney or brain.